



# Skin Ellipse Excision



## Lesson plan overview

**Time:** 09:00 – 12:00

**Population:** 8 MBBS medical students

**Facilitator:** A suitable medical professional

**Venue:** A suitable clinical teaching classroom

<b>Lesson aim</b>	By the end of the session, students should be able to competently perform an ellipse excision
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**Lesson design overview:**

1. Use of constructive alignment to focus on aligning LOs to teaching and assessment activities [1]
2. Formation of LOs using Bloom's cognitive domain [2]
3. Lesson plan guided by Gagne's 9 events [3] alongside Peyton's 4 step approach [4]

**Learning Outcomes (LOs):**

1. Learn the steps involved in an ellipse excision
2. Define the terms ellipse excision and tension free closure
3. Identify the reasons for requiring an elliptical excision to be performed
4. Understand and perform the steps involved in an ellipse excision
5. Describe the complications of ellipse excisions
6. Differentiate between an ellipse excision and other common excisions

**Resources:**

- Computer
- PowerPoint
- Interactive whiteboard
- Whiteboard pens
- Speaker
- 16x Question papers
- 8x Pens
- 8x Whiteboard pens
- 8x Surgical skin markers
- 8x Toothed forceps
- 8x Training suture pads
- 8x Pairs of gloves
- 8x Scalpels
- 1x Stopwatch
- 8x Feedback forms

09:00	20 question assessment, introduction of LOs I, II
09:15	Group task: discuss the steps involved in an ellipse excision III
09:40	Lecture on ellipse excisions, including a 2-minute video IV, V
10:10	Demonstration of an ellipse excision by the facilitator V
10:30	Students recall the steps as a group, then practice on suture pad VI, IX
10:55	Break
11:00	Assessment: mini competition. VII, VIII, IX
11:15	Repeat 20-question assessment and mark both assessments VIII, IX
11:35	Summary, reflection and feedback form IX

^^Lesson plan guided by Gagne's 9 events (I-IX) ^^ of instruction [4]

**Peyton's 4 step approach integrated within the practical aspect of the lesson plan [4]:**

1. **Demonstration**
  - Once through demonstration of the ellipse excision steps at normal pace
2. **Deconstruction**
  - Facilitator repeats demonstration, breaking down & explaining each step
3. **Comprehension**
  - Recall the steps of ellipse excision as a group
4. **Performance**
  - Students should individually practice performing an ellipse excision on the training suture pad

**Establishing session effectiveness:**

1. **Ellipse excision competition**
  - Students compete head-to-head
  - Marks fall into 2 parts:
    - Assessment of performance of ellipse excision steps (judged by facilitator)
    - Time taken to complete procedure
2. **20-question assessment**
  - Repeating identical assessment at the end of the lesson assesses students' performance [4] and the effectiveness of the constructive alignment framework [1]

**References:**

1. Biggs, J. (1996). Enhancing Teaching through Constructive Alignment. *Higher Education*, 32(3), 347–364. <http://www.jstor.org/stable/3448076>
2. Bloom, B. S. (1956). *Taxonomy of Educational Objectives, Handbook I. The Cognitive Domain*. New York: David McKay Co Inc.
3. Gagné, R. M. (1965). *The conditions of learning* (1st ed.). New York: Holt, Rinehart & Winston.
4. Peyton, J.W.R., 1998. Teaching in theatre. Teaching and learning in medical practice. *Manticore*, pp.171-180.



**Table 1: Lesson Plan, guided by Gagne’s (1965) nine events of instruction with incorporation of Peyton’s (1998) four step approach into the practical part**

Time	Resources	Student Activity	Facilitator notes
09:00 – 09:10	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Interactive whiteboard</li> <li>• PowerPoint</li> <li>• 8x question sheets</li> <li>• 8x pens</li> </ul>	<ul style="list-style-type: none"> <li>• Give students 10 minutes to complete the 20-question assessment</li> <li>• Collect the sheets in once the students have finished, ensure they have written their name on the back if the paper</li> </ul>	<ul style="list-style-type: none"> <li>• Have the PowerPoint open on the whiteboard displaying skin excision facts as students are entering classroom</li> <li>• This aims to gain attention promptly so lesson can to schedule, especially with the strict time schedule</li> <li>• Hand out the question sheet with the 20-question assessment before students enter the teaching room. This comprises of some previous knowledge but mainly questions relating to the lesson LOs delivered through theory teaching</li> </ul>
09:10- 09:15	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Interactive whiteboard</li> <li>• PowerPoint</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to the lesson aim and LOs</li> <li>• Give students the opportunity to raise their hand and clarify any terminology within the LOs that they do not understand</li> <li>• Allow them to write down the LOs if they feel this is appropriate</li> </ul>	<ul style="list-style-type: none"> <li>• Introduce the aim of the lesson and the LOs to the students</li> </ul>
09:15-09:40	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Interactive whiteboard</li> <li>• PowerPoint</li> <li>• Whiteboard pens</li> </ul>	<ul style="list-style-type: none"> <li>• Group discussion – discuss the steps involved in an ellipse excision</li> </ul>	<ul style="list-style-type: none"> <li>• Aim of this activity is to establish the students baseline knowledge</li> <li>• Allow 10 minutes for discussion in pairs</li> <li>• Allow 15 minutes for a whole class discussion</li> <li>• Allow students to write their thoughts and ideas on the interactive whiteboard</li> </ul>
09:40-10:00	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Interactive whiteboard</li> <li>• PowerPoint</li> </ul>	<ul style="list-style-type: none"> <li>• Students should listen to the 20-minute lecture on ‘Ellipse Excisions’ delivered by the facilitator</li> <li>• Students may take notes if this facilitates their learning and understanding</li> </ul>	<ul style="list-style-type: none"> <li>• Deliver the PowerPoint presentation on ‘Ellipse Excisions’ – this covers all LOs</li> <li>• Ensure students understand all new terminology</li> <li>• Important to keep to the time limit of 20 minutes to maintain students’ attention and prevent lapse of concentration</li> </ul>
10:00-10:10	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Interactive whiteboard</li> <li>• Speakers</li> </ul>	<ul style="list-style-type: none"> <li>• Watch the video ‘Surgical Skills - Elliptical Incision of a Skin Lesion ’</li> <li>• Encourage students to put their hand up and ask questions when playing the video for the 2<sup>nd</sup> time</li> </ul>	<ul style="list-style-type: none"> <li>• YouTube video, by TeachMeSurgery: <a href="https://www.youtube.com/watch?v=vu5CZWd5dsw">https://www.youtube.com/watch?v=vu5CZWd5dsw</a> (TeachMeSurgery, 2015)</li> <li>• Play the video through twice. Play the video all the way through initially without any pauses. On watching the video for the 2<sup>nd</sup> time, pause the video if students want to ask questions</li> </ul>
10:10 – 10:30	<ul style="list-style-type: none"> <li>• 1x surgical skin marker</li> <li>• 1x training suture pad</li> <li>• 1x scalpel</li> <li>• 1x toothed forceps</li> <li>• 1x pair of gloves</li> </ul>	<ul style="list-style-type: none"> <li>• Watch the facilitator demonstrate the steps of an ellipse excision</li> </ul>	<ul style="list-style-type: none"> <li>• When demonstrating an ellipse excision, do a once through demonstration of each of the steps at normal pace.</li> <li>• Then repeat the demonstration, breaking down and explaining each step</li> </ul>
10:30 – 10:35	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Interactive whiteboard</li> <li>• PowerPoint</li> </ul>	<ul style="list-style-type: none"> <li>• Ask students to recall the steps of an ellipse excision as a group</li> </ul>	<ul style="list-style-type: none"> <li>• This is to test students understanding of the demonstration and retention of information</li> <li>• After, display a summary slide of the steps on the PowerPoint, allow students to see how much they could recall, give feedback</li> </ul>

**References:**  
Gagné, R. M. (1965). *The conditions of learning* (1st ed.). New York: Holt, Rinehart & Winston.  
Peyton, J.W.R. (1998). Teaching in theatre. Teaching and learning in medical practice. *Manticore*, pp.171-180.  
TeachMeSurgery (2015). Surgical Skills - Elliptical Incision of a Skin Lesion. (Accessed 14/07/2024). Available at: <https://www.youtube.com/watch?v=vu5CZWd5dsw>



**Table 1:** Lesson Plan, guided by Gagne’s (1965) nine events of instruction with incorporation of Peyton’s (1998) four step approach into the practical part

Time	Resources	Student Activity	Facilitator notes
10:35 – 10:55	<ul style="list-style-type: none"> <li>• 8x surgical skin markers</li> <li>• 8x training suture pads</li> <li>• 8x scalpels</li> <li>• 8x toothed forceps</li> <li>• 8x pairs of gloves</li> <li>• Computer</li> <li>• Interactive whiteboard</li> <li>• PowerPoint</li> </ul>	<ul style="list-style-type: none"> <li>• Students should now individually practice performing an ellipse excision on the suture pad</li> </ul>	<ul style="list-style-type: none"> <li>• Give 1 suture pad per student to give allow for maximal learning opportunity</li> <li>• Observe each student and give individual feedback</li> <li>• Slide showing a summary of the ellipse excision steps should be left on whiteboard display for students to refer to</li> </ul>
10:55 – 11:00		<ul style="list-style-type: none"> <li>• Break</li> </ul>	
11:00 – 11:15	<ul style="list-style-type: none"> <li>• 8x surgical skin markers</li> <li>• 8x training suture pads</li> <li>• 8x scalpels</li> <li>• 8x toothed forceps</li> <li>• 8x pairs of gloves</li> <li>• Stopwatch</li> </ul>	<ul style="list-style-type: none"> <li>• Students should compete head-to-head in a mini competition, assessing the best performance of an ellipse excision</li> </ul>	<ul style="list-style-type: none"> <li>• Students should compete head-to-head against each other</li> <li>• Allocate 10 minutes for the mini competition</li> <li>• Allow for 5 minutes to give the results from the competition and give each individual brief feedback</li> <li>• Marks for the mini competition fall into 2 parts; assessment of performance and technique (judged by facilitator), and time taken for the student to perform an ellipse excision from start to finish (timed using a stopwatch)</li> </ul>
11:15 – 11:35	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Interactive whiteboard</li> <li>• PowerPoint</li> <li>• 8x question sheets</li> <li>• 8x pens</li> </ul>	<ul style="list-style-type: none"> <li>• Get students to repeat the 20-question assessment</li> <li>• Students should then self-mark both copies of their assessments</li> <li>• Students should compare their pre-lesson score to their post-lesson score and reflect on what they have learnt</li> </ul>	<ul style="list-style-type: none"> <li>• Give the students 10 minutes to repeat the 20-question assessment</li> <li>• Repeating the identical assessment at the end assesses students’ retention of knowledge</li> <li>• Then hand back the same assessment from the start of the lesson</li> <li>• Get students to self-mark both copies of their assessments whilst the facilitator gives the answers alongside explanations for each answer</li> </ul>
11:35-11:45	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Interactive whiteboard</li> <li>• PowerPoint</li> </ul>	<ul style="list-style-type: none"> <li>• Summary and review of LOs</li> </ul>	<ul style="list-style-type: none"> <li>• Summarise key learning points of the lesson and review LOs</li> <li>• Ask the students to explain each LO as a group to test learning and knowledge</li> </ul>
11:45- 11:55		<ul style="list-style-type: none"> <li>• Student reflection and Q&amp;A session</li> </ul>	<ul style="list-style-type: none"> <li>• Students should share with the group one thing they have learnt from the lesson; it cannot be the same as anyone else</li> <li>• Allow time for students to ask any questions that they may still have</li> </ul>
11:55 – 12:00	<ul style="list-style-type: none"> <li>• 8x feedback forms</li> <li>• 8x pens</li> </ul>	<ul style="list-style-type: none"> <li>• Students should be encouraged to fill out the feedback form</li> </ul>	<ul style="list-style-type: none"> <li>• Hand out the feedback form and pens for students to complete</li> <li>• Questions have been designed to assess the effectiveness of the lesson</li> <li>• Give students the opportunity to provide verbal feedback too</li> </ul>

**References:**

- Gagné, R. M. (1965). *The conditions of learning* (1st ed.). New York: Holt, Rinehart & Winston.  
Peyton, J.W.R. (1998). Teaching in theatre. Teaching and learning in medical practice. *Manticore*, pp.171-180.